

PATENT

What is claimed is:

1 1. A process carried out in a usage-measuring server for controlling access to usage data
2 collected in a usage-based licensing system and metric data generated therefrom, comprising:
3 receiving a log-in communication from a remote user containing the user's user name
4 and password;
5 using said user name and password to authenticate the identity of the user;
6 if the user is not authenticated, sending an access denied message;
7 if the user is authenticated, sending an inquiry to the user requesting him to identify
8 which client(s), which provisioning lists and/or which resource(s) and/or usage data, metric data
9 and/or CSU data is/are of interest and, if metric, raw usage data and/or CSU data is of interest,
10 which of the metric, raw usage data, and/or CSU data the user wants to view and/or download;
11 receiving a message indicating which client(s) and resource(s) are of interest and, if
12 the metric, usage or CSU data of the identified client(s) and resource(s) are of interest, which
13 metric, raw usage data, and/or CSU data the user wants to view and/or download;
14 consulting configuration data to determine if this user has access to data for the
15 client(s) and/or resource(s) and any metric, raw usage and/or CSU data the user requested;
16 if not, sending an access denied message; and
17 if the user is allowed to have access to the data of the client(s) and resource(s)
18 identified, then retrieving and transmitting the requested data to the user.

1 2. The process of claim 1 wherein said remote user access said client and resource data
2 over the internet or by any other wide area network or by direct dial up access.

1 3. A process carried out in a usage-measuring server for controlling access to usage data
2 collected in a usage-based licensing system and metric data generated therefrom, comprising:
3 receiving a log-in communication from a remote user containing the user's user name
4 and password;
5 using said user name and password to authenticate the identity of the user;
6 if the user is not authenticated, sending an access denied message;
7 if the user is authenticated, sending an inquiry to the user requesting him to identify
8 which data the user wants to view and/or download;
9 receiving a message indicating which data is/are of interest;
10 consulting configuration data to determine if this user has access to the requested

COM-002.8D Spec 4/01.doc

PATENT

11 data;
12 if not, sending an access denied message;
13 if the user is allowed to have access to the requested data then retrieving and
14 transmitting the requested data to the user.

1 4. The process of claim 3 further comprising the steps of:
2 sending a message to the user inquiring if she has any new client(s) and/or
3 resource(s) to declare;
4 if the user has no new resource(s) and/or client(s) to declare, terminating the user's
5 connection or otherwise ending the session;
6 if the user indicates she has new resource(s) and/or client(s) to declare, requesting
7 transmission of data identifying the resource(s) and/or client(s) and the attributes of each; and
8 creating new data entries in the data structure of said usage measuring server which
9 memorialize said new resource(s) and/or new client(s) and their attributes and relationships to
10 other data entries in the data structure.

1 5. A process carried out in a usage-measuring server for controlling access to usage data
2 collected in a usage-based licensing system data structure containing, among other things, usage
3 data and metric data generated therefrom, comprising:
4 receiving a log-in communication from a remote user containing the user's user name
5 and password;
6 using said user name and password to authenticate the identity of the user;
7 if the user is not authenticated, sending an access denied message;
8 if the user is authenticated, sending an inquiry to the user requesting him to identify
9 which data the user wants to view and/or download;
10 receiving a message indicating which data is/are of interest;
11 determining if there are links in said data structure that directly or indirectly couple a
12 data entry representing said authenticated user to the requested data;
13 if not, sending an access denied message;
14 if there are such links, then retrieving the portion of the requested data to which the
15 user is allowed to have access and transmitting it to the user.

1 6. The process of claim 5 further comprising the steps of:
2 sending a message to said user to which said data was sent inquiring whether the
COM-002.8D Spec 4/01.doc

PATENT

3 user wishes to modify any of the data sent to the user;
4 receiving a message back indicating modification is desired of specified data;
5 checking configuration data to determine if modification of the specified data is
6 allowed;
7 if so, sending a message indicating modification is allowed;
8 if not, sending a message indication modification is not allowed;
9 if modification is allowed, and the user modifies the data and sends it back to said
10 server, storing the modified data.

1 7. A server computer programmed with program means for performing the following
2 functions:
3 1) receiving a log-in communication from a remote user containing the user's user
4 name and password;
5 2) using said user name and password to authenticate the identity of the user;
6 3) if the user is not authenticated, sending an access denied message;
7 4) if the user is authenticated, sending an inquiry to the user requesting him to
8 identify which data the user wants to view and/or download;
9 5) receiving a message indicating which data is/are of interest;
10 6) determining if there are links in said data structure that directly or indirectly couple
11 a data entry representing said authenticated user to the requested data;
12 7) if not, sending an access denied message;
13 8) if there are such links, then retrieving the portion of the requested data to which
14 the user is allowed to have access and transmitting it to the user.

1 8. The apparatus of claim 7 wherein said server computer is further programmed by program
2 means for performing the following additional functions:
3 sending a message to said user to which said data was sent inquiring whether the
4 user wishes to modify any of the data sent to the user;
5 receiving a message back indicating modification is desired of specified data;
6 checking configuration data to determine if modification of the specified data is
7 allowed;
8 if so, sending a message indicating modification is allowed;
9 if not, sending a message indication modification is not allowed;
10 if modification is allowed, and the user modifies the data and sends it back to said

PATENT

11 server, storing the modified data.

1 9. The apparatus of claim 7 wherein the server is programmed to implement function 6 by
2 restricting access to only data that is within the direct family tree of the user who logged in.

1 10. The apparatus of claim 6 wherein the server is programmed to implement function 6 by
2 restricting access by a user/licensee to only data entries in the direct family tree of the user who
3 logged in which includes both the direct licensor from whom said user/licensee took a license but not
4 any higher level licensor or distributor who licensed said direct licensor as well as direct licensees
5 who take licenses from said user who logged in so as to prevent any licensee from obtaining
6 information by which it might attempt to cut out an entity in the distribution chain and take a license
7 directly from some higher level entity or cut out a licensee subdistributor and license directly to that
8 licensee subdistributor's licensees.

1 11. The apparatus of claim 6 wherein the server is programmed to implement function 6 by
2 restricting access to only data that is within the direct family tree of the user who logged in or that is
3 within an agnostic paradigm with said user.

1 12. A server computer programmed by program means for performing the following
2 functions:

3 receiving a secure log-in communication from a remote user containing the user's
4 user name and password;

5 using said user name and password to authenticate the identity of the user;

6 if the user is not authenticated, sending a secure access denied message;

7 if the user is authenticated, sending a secure inquiry message to the user requesting
8 him to identify which client(s), which provisioning lists and/or which resource(s) and/or usage
9 data, metric data and/or CSU data is/are of interest and, if metric, raw usage data and/or
10 CSU data is of interest, which of the metric, raw usage data, and/or CSU data the user wants
11 to view and/or download;

12 receiving a secure message from said user indicating which client(s) and resource(s)
13 are of interest and, if the metric, usage or CSU data of the identified client(s) and resource(s)
14 are of interest, which metric, raw usage data, and/or CSU data the user wants to view and/or
15 download;

16 consulting configuration data to determine if this user has access to data for the
COM-002.8D Spec 4/01.doc

PATENT

17 client(s) and/or resource(s) and any metric, raw usage and/or CSU data the user requested;
18 if not, sending a secure access denied message; and
19 if the user is allowed to have access to the data of the client(s) and resource(s)
20 identified, then retrieving and transmitting by one or more secure messages the requested
21 data to the user.

1 13. The server computer of claim 12 further programmed with program means to carry out
2 the following functions:
3 sending a message to the user inquiring if she has any new licensees and/or
4 distributors and/or resource(s) to declare;
5 if the user has no new resource(s) and/or licensees and/or distributors to declare,
6 terminating the user's connection or otherwise ending the session;
7 if the user indicates she has new resource(s) and/or new licensees and/or distributors
8 to declare, requesting transmission of data identifying the resource(s) and/or licensees and/or
9 distributors and the attributes of each; and
10 creating new data entries in the data structure of said usage measuring server which
11 memorialize said new resource(s) and/or new licensees and/or distributors and their
12 attributes and all relationships between these new entities to other data entries in the data
13 structure.